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# **Safety Assessment Surveys**

**Robert C. Figlock, Ph.D.**

**Advanced Survey Design**

# Overview

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- **Intro - Command Safety Climate Assessment Survey**
- **Background - High Reliability Organizations**
- **Current Surveys/Additional Surveys**
  
- **Example - Safety Climate Assessment Survey**
- **Commander Tools for Assessment**

# Command Safety Assessment Survey

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- **Command Safety Climate Assessment Survey**
  - **Focus: Squadron-level organizational dynamics as they relate to safety**
    - Perceptions and attitudes underlie human factors, affect safety
    - Looking for institutional vulnerabilities, not individual failings
  - **Survey items - Based on High Reliability Organization (HRO) concepts**

# **High Reliability Organizations (HRO)**

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- **HRO's - Organizations that have less than their “fair share” of failures despite:**
  - **Managing Complex/demanding technologies**
  - **Meeting peak performance requirements/time pressures**
  - **Routinely handling significant risk/hazards**
  - **Executing dynamic/intensely interactive tasks**
- **Examples**
  - **Nuclear power plants**
  - **Chemical processing plants**
  - **Navy aircraft carriers**
  - **Naval Aviation squadrons**
  - **Naval organizations**
  - **DoD organizations**

# **High Reliability Organizations (HRO)**

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- **Characteristics of HROs**
  - **Risk decisions made by most qualified**
  - **Use of redundancy and back up systems**
  - **Standardized procedures and best practices**
  - **Appropriate rewards and disciplinary action**
  - **Accurate management vision/risk analysis**

# **High Reliability Organizations (HRO)**

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- **Ways HROs mitigate risk**
  - **Risk decisions made by most qualified**
  - **Use of redundancy, back up systems**
  - **Standardized procedures, best practices**
  - **Appropriate rewards, disciplinary action**
  - **Accurate management vision/risk analysis**

# High Reliability Organizations (HRO)

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## ■ Model Components

- **Process Auditing** -- a system of on-going checks to monitor hazardous conditions
- **Reward System** -- expected social compensation or disciplinary action to reinforce/correct behavior
- **Quality** -- policies and procedures for promoting high-quality performance
- **Risk Management** -- how the organization perceives risks and takes corrective actions
- **Command & Control** -- policies and procedures used to mitigate risks
- **Communication & Functional Relationships** - effectiveness of information transfer and quality of relationships with surrounding organizations

# **Current Surveys**

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- **Current Surveys**
  - CSA (aircrew)
  - MCAS (maintainer)
  - NADEP MCAS
  - Afloat Navy (NSC)
- **Army Risk Assessment Program (ARAP)**
- **USAF - Safety Assessment Survey (SAS)**

# **Additional Surveys**

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- **Coming Soon!**
  - **Contractor maintenance**
  - **Higher headquarters staff**
  - **PMV**
  - **Drinking & Driving**
  - **Off Duty & Recreational activity**
  
- **DoD assessment surveys**

# Safety Climate Assessment Survey

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## ■ Definition

- **Measurement of an organization's ability to safely conduct maintenance and flight operations in terms of leadership, culture, policies, standards, procedures, and practices.**

## ■ Survey Policies

- **Individual survey respondent anonymity**
- **Organizational confidentiality**
- **Restricted access codes provided to the unit CO**
- **HHQ ability to access aggregate data**
- **Ability to conduct unfettered research/data analysis**

# Safety Climate Assessment Survey

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- Aggregate survey items graph
- Individual survey item graphs
- Open-ended responses
- Printable data summary
- Debriefing support
- Intervention module



School of  
**Aviation Safety**  
Naval Postgraduate  
School

C.S.C.A.S. POLICY  
SURVEY INSTRUCTIONS  
SURVEY OVERVIEW  
SAMPLE SURVEY  
TAKE A SURVEY  
SURVEY ADMIN  
CO ACCESS  
SAMPLE CO ACCESS  
ISSUE PAPERS  
SITE MAP  
HELP/FAQ  
CONTACT US  
SUGGESTIONS

# Command Safety Climate Assessment Surveys



**PART I. DEMOGRAPHIC INFORMATION**

The following survey is a SAMPLE. No actual responses will be recorded.

For the actual survey, no individual's demographic data will be made available to any CO.

Your Grade/Rank: Select from the following: Total years aviation maintenance experience: Select from the following: Total years Naval Aviation Depot experience: Select from the following: Your current job/trade: Select from the following: Total years in your current job/trade: Select from the following: Your primary shift: Select from the following: Your primary program:  
(Select all that apply)  
A-4  
AH-1  
AV-8  
C-130Your status: Select from the following: Your Service: Select from the following: Your parent command: NADEP Your unit's location: Select from the following: 

## Closed-ended Items

44. The next quality defect will be caused by.... (200 words max.)

 No comment  My response is:

45. The next quality defect can be prevented by .... (200 words max.)

 No comment  My response is:

## Demographic Data

The following survey is a SAMPLE. No actual responses will be recorded.

1. The NADEP adequately reviews and updates safety procedures.

<input type="radio"/>	Strongly Disagree	<input type="radio"/>	Disagree	<input type="radio"/>	Neutral	<input type="radio"/>	Agree	<input type="radio"/>	Strongly Agree	<input type="radio"/> N/A	<input type="radio"/> Don't Know
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2. The chain of command monitors artisan qualifications and has a program that targets training deficiencies.

<input type="radio"/>	Strongly Disagree	<input type="radio"/>	Disagree	<input type="radio"/>	Neutral	<input type="radio"/>	Agree	<input type="radio"/>	Strongly Agree	<input type="radio"/> N/A	<input type="radio"/> Don't Know
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3. Supervisors use safety and medical staff to identify/manage personnel at risk.

<input type="radio"/>	Strongly Disagree	<input type="radio"/>	Disagree	<input type="radio"/>	Neutral	<input type="radio"/>	Agree	<input type="radio"/>	Strongly Agree	<input type="radio"/> N/A	<input type="radio"/> Don't Know
-----------------------	-------------------	-----------------------	----------	-----------------------	---------	-----------------------	-------	-----------------------	----------------	---------------------------	----------------------------------

4. Quality Assurance routinely monitors rework/repair/maintenance tasks.

<input type="radio"/>	Strongly Disagree	<input type="radio"/>	Disagree	<input type="radio"/>	Neutral	<input type="radio"/>	Agree	<input type="radio"/>	Strongly Agree	<input type="radio"/> N/A	<input type="radio"/> Don't Know
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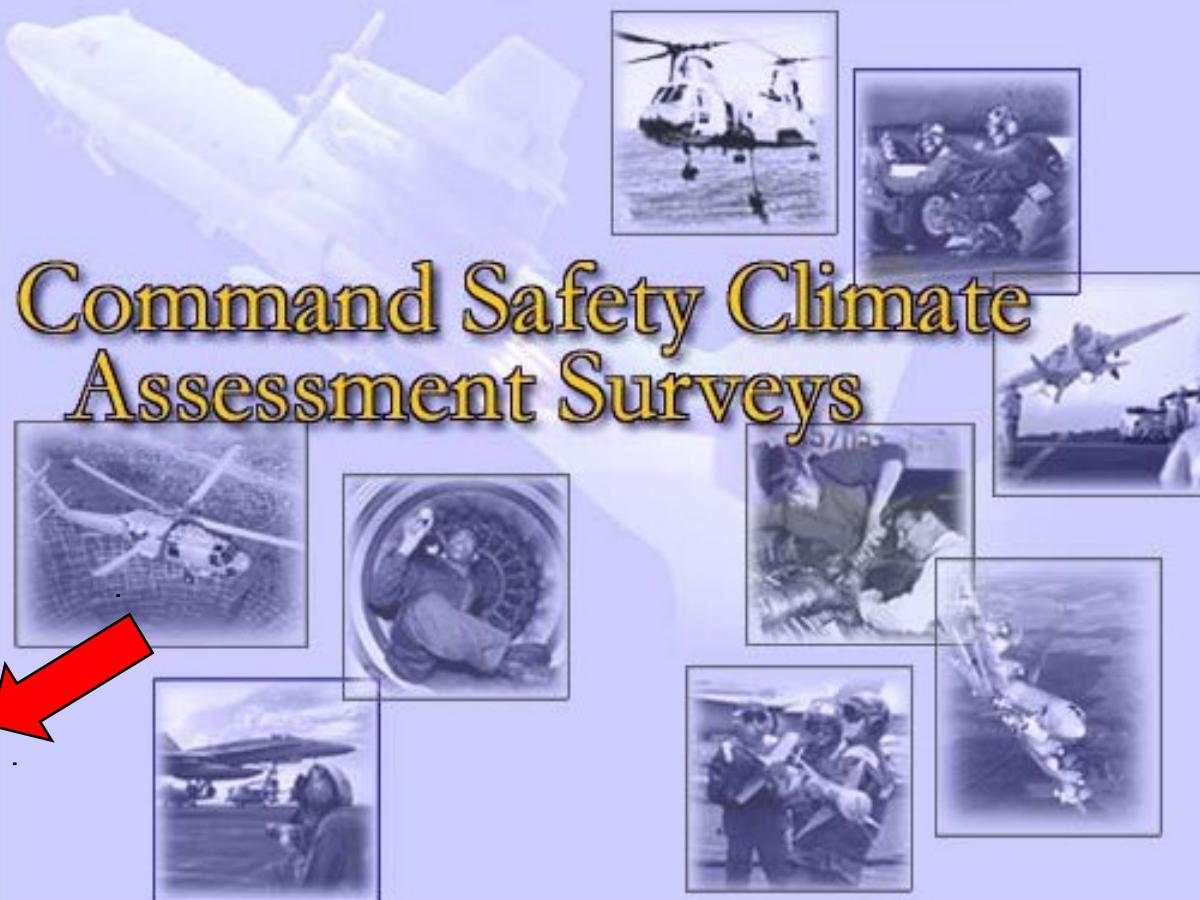
5. Tool Control and support equipment licensing are closely monitored.

## Open-ended Items



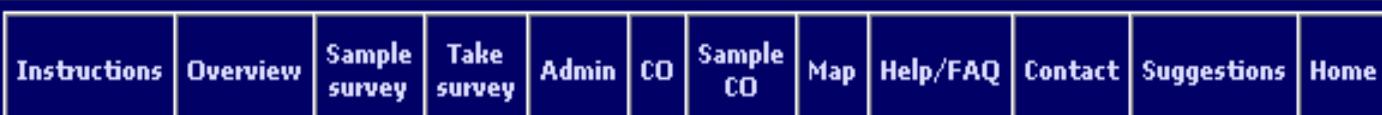
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**Aviation Safety**  
Naval Postgraduate  
School

C.S.C.A.S. POLICY  
SURVEY INSTRUCTIONS  
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SAMPLE SURVEY  
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SUGGESTIONS





Address [http://www.safetyclimatesurveys.org/pagesboth/co\\_access/sysdefault.asp?NoCache=6%2F22%2F2004+12%3A23%3A0](http://www.safetyclimatesurveys.org/pagesboth/co_access/sysdefault.asp?NoCache=6%2F22%2F2004+12%3A23%3A0) Go Links >



## CO ACCESS

### LOGIN

Please enter the following:

COs AccessID:

 Select from the following: ▾

Community

Option: COs AccessID from squadron's *prior surveys*  
(if present, comparisons will use this instead of other squadrons)

**Password  
Protected**



## CO ACCESS

### COMMAND SAFETY ASSESSMENT (CSA) SURVEY

*Please read prior to proceeding!*

#### Overview

This module provides access to the Command Safety Assessment Survey (CSA) database. It is intended to measure the perceived safety climate within Naval Aviation organizations. Squadron commanding officers can review their individual unit survey results, as well as compare them to a variety of other Naval Aviation communities, organizations, or locations. Other select commanders may review MCAS data, but only above the squadron level. As a reminder, this website preserves individual survey respondent anonymity.

To get an overview of the Command Safety Climate Assessment Survey process and its conceptual framework, please [click here](#).

#### CSA Items

The following charts depict the response distribution for each survey item. Responses ranging from "Strongly Disagree" to "Strongly Agree" were assigned values from "1" to "5", respectively. Then, each item value was entered into a spreadsheet for analysis. Total responses, response mean, and standard deviation are presented in each chart. "N/A" and "Don't Know" responses were not computed into the statistical calculations.

Although means that fall between "4" and "5" are viewed as generally favorable, your specific organizational maintenance environment (e.g., deployed, non-deployed, current operations, manning, etc.) at the time of the survey needs to be considered. Also, some items with even limited negative responses, may generate concern, regardless of the mean (e.g., the survey item concerning "cutting corners" to complete a job). As a general guideline, consider each question based upon your evaluation of your current operating environment and relative importance that you place on that specific survey item.

If you have any questions please feel free to contact Bob Figlock at (831) 656-1069 or DSN 756-1069 or Michael Schimpf at (831) 274-2335.

You may view the [Individual Item Graph](#) details page, which permits viewing results and comparisons for each survey item or the [Summary Graphs and Tables](#) page showing overall averages and standard deviations for all items. Note that once you get to the Individual Items page, you can click the **HSL100** button to show the Items Summary. Similarly, from the Items Summary page, click **Done** to display Individual Item data.

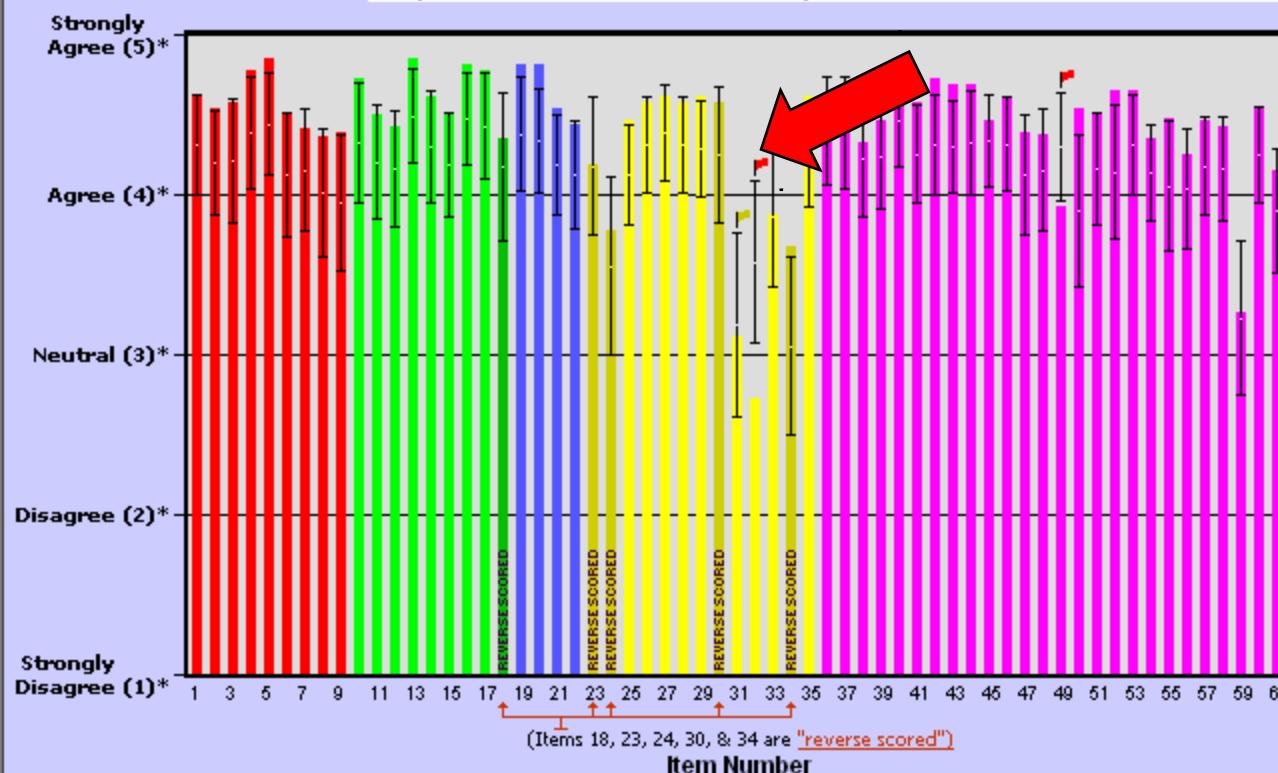
You may print a [Summary of your CSA Data](#).

You may download several [Debriefing Support](#) documents, including an Example Survey Debrief and a (PowerPoint) Recommended Form for debriefing your ISIC, if desired.

[Individual Item Graph](#)[Summary Graphs and Tables](#)[Printable Data Summary](#)[Debriefing Support](#)



### Graph Of Mean For All Items Compared With Mean And Standard Deviation For Community (VMFA)



#### Comparison (all years):

- All (CSA) respondents
- All Navy (CSA only)
- All USMC (CSA only)
- All fixed wing (CSA only)
- All helo (CSA only)
- My community (VMFA, CSA only)
- No comparisons

Place mouse pointer on a colored bar to show the text for that item.  
Click on a bar to display Individual Item Graph.

### Legend

#### Survey Item Category:

- PA: Process Auditing
- RS/SC: Reward Systems & Safety Culture
- QA: Quality Assurance
- RM: Risk Management
- CC: Command & Control

#### Notes:

- I Comparison's standard deviation centered on its mean (white dot)
- Mean is less than comparison but within one-half standard deviation
- Mean is below one-half standard deviation less than comparison

### Composite Categories Graph

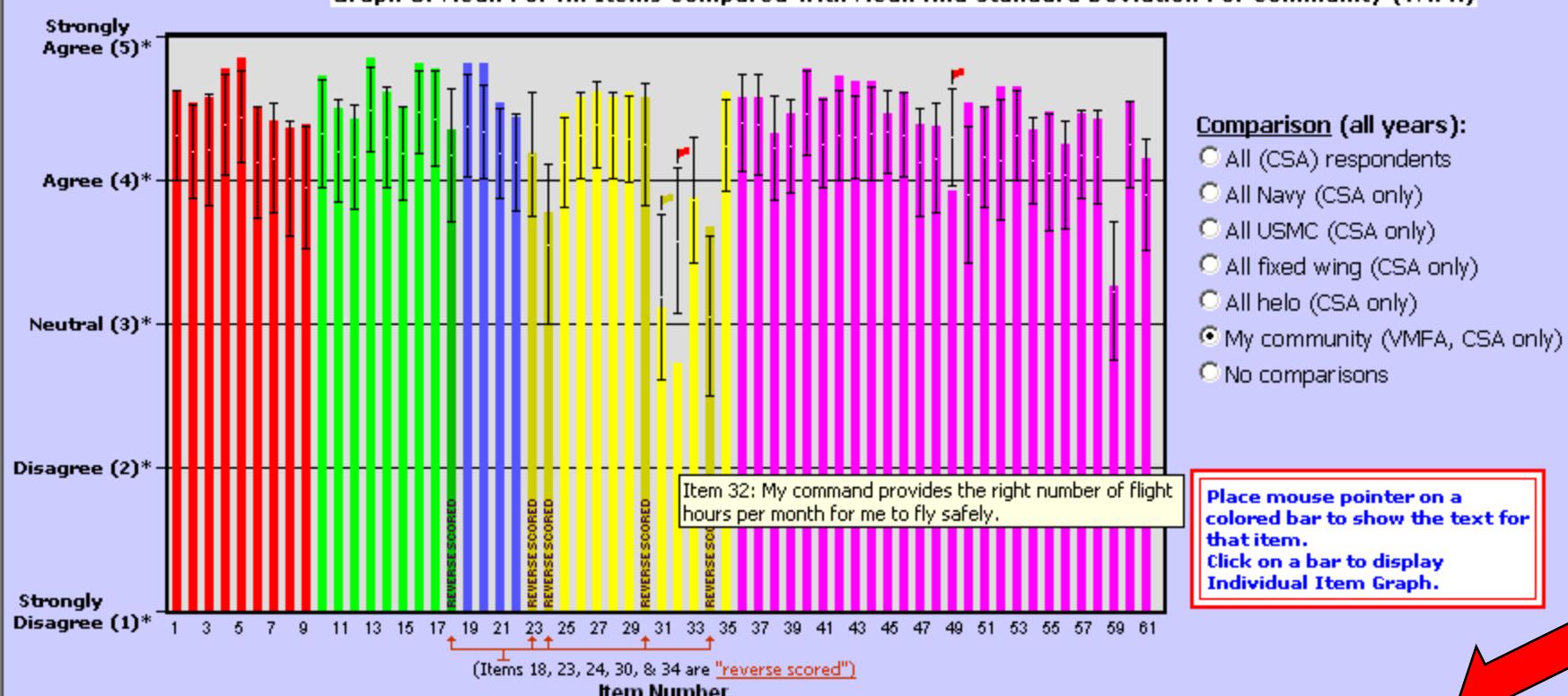
[All Survey Items Table](#)

[Individual Item Graph](#)

[Printable Data Summary](#)

[Debriefing Support](#)

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[Composite Categories Graph](#)

[All Survey Items Table](#)

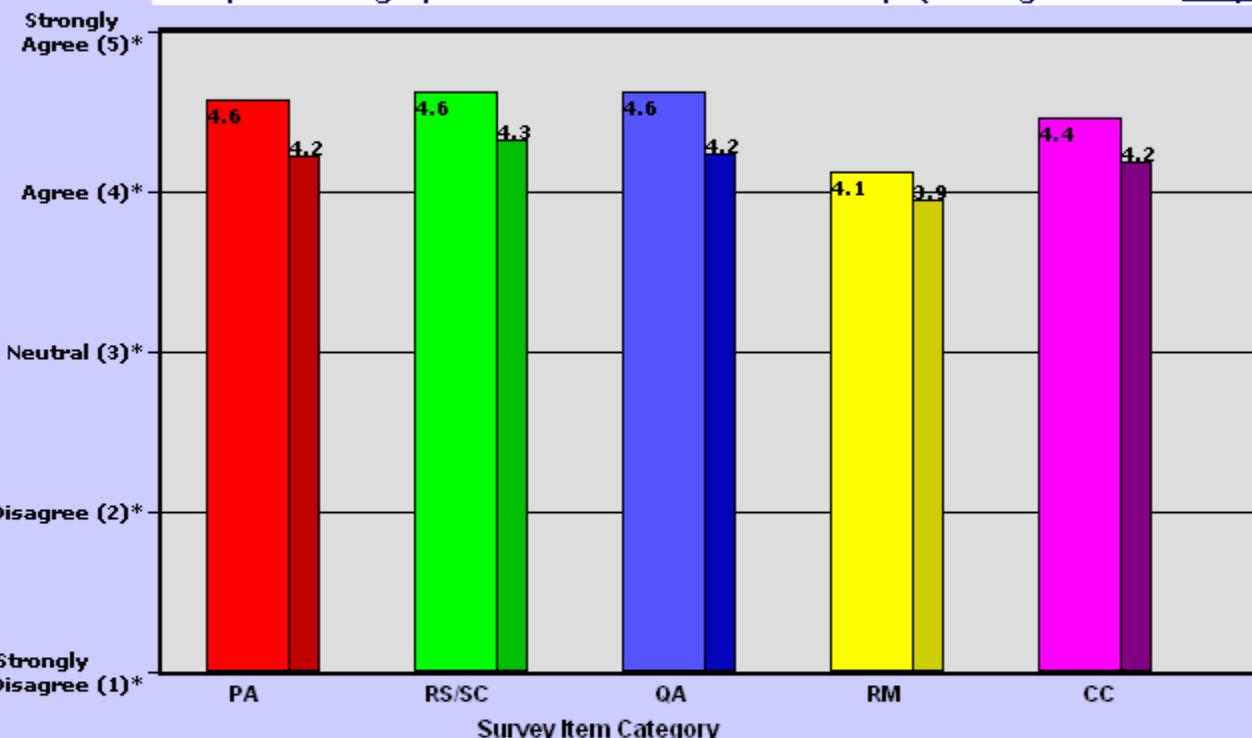
[Individual Item Graph](#)

[Printable Data Summary](#)

[Debriefing Support](#)



### Composite Category Mean scores for VMFA3029 surveys (showing Means for Comparison population)

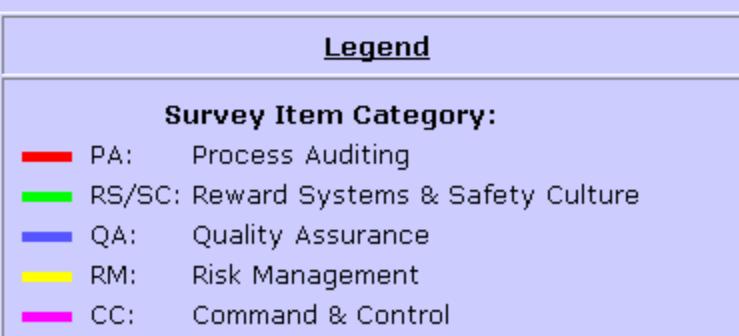


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- No comparisons

Place mouse pointer on a colored bar to show the text for that item.  
Click on a bar to display Individual Item Graph.

(Light-colored bar is VMFA3029 value, dark-colored bar is VMFA Community value)



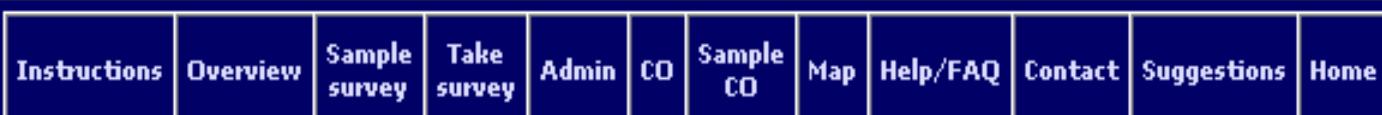
[All Survey Items Graph](#)

[All Survey Items Table](#)

[Individual Item Graph](#)



Address [http://www.safetyclimatesurveys.org/pagesboth/co\\_access/sysdefault.asp?NoCache=6%2F22%2F2004+12%3A23%3A0](http://www.safetyclimatesurveys.org/pagesboth/co_access/sysdefault.asp?NoCache=6%2F22%2F2004+12%3A23%3A0) Go Links >



## CO ACCESS

### LOGIN

Please enter the following:

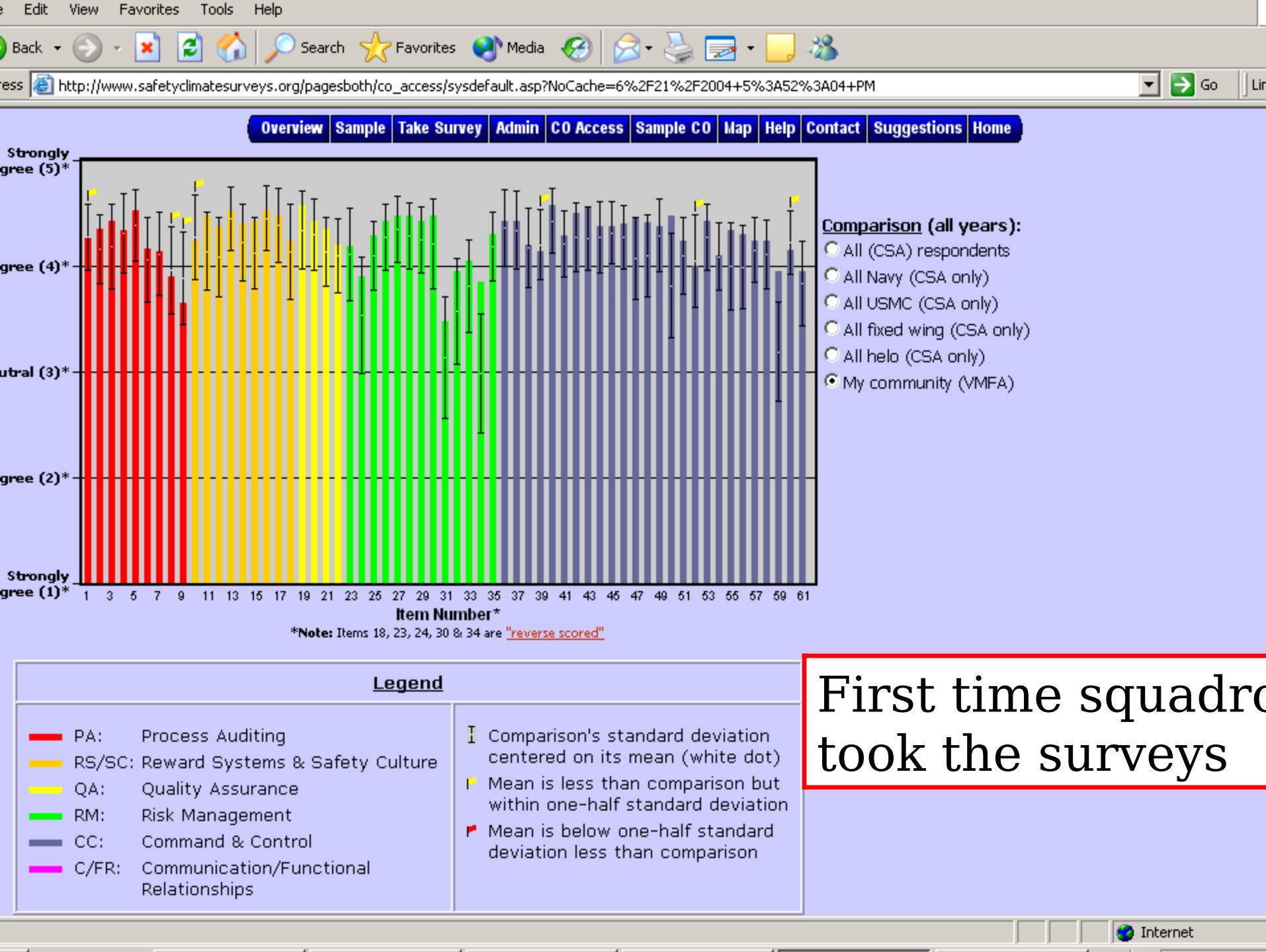
COs AccessID

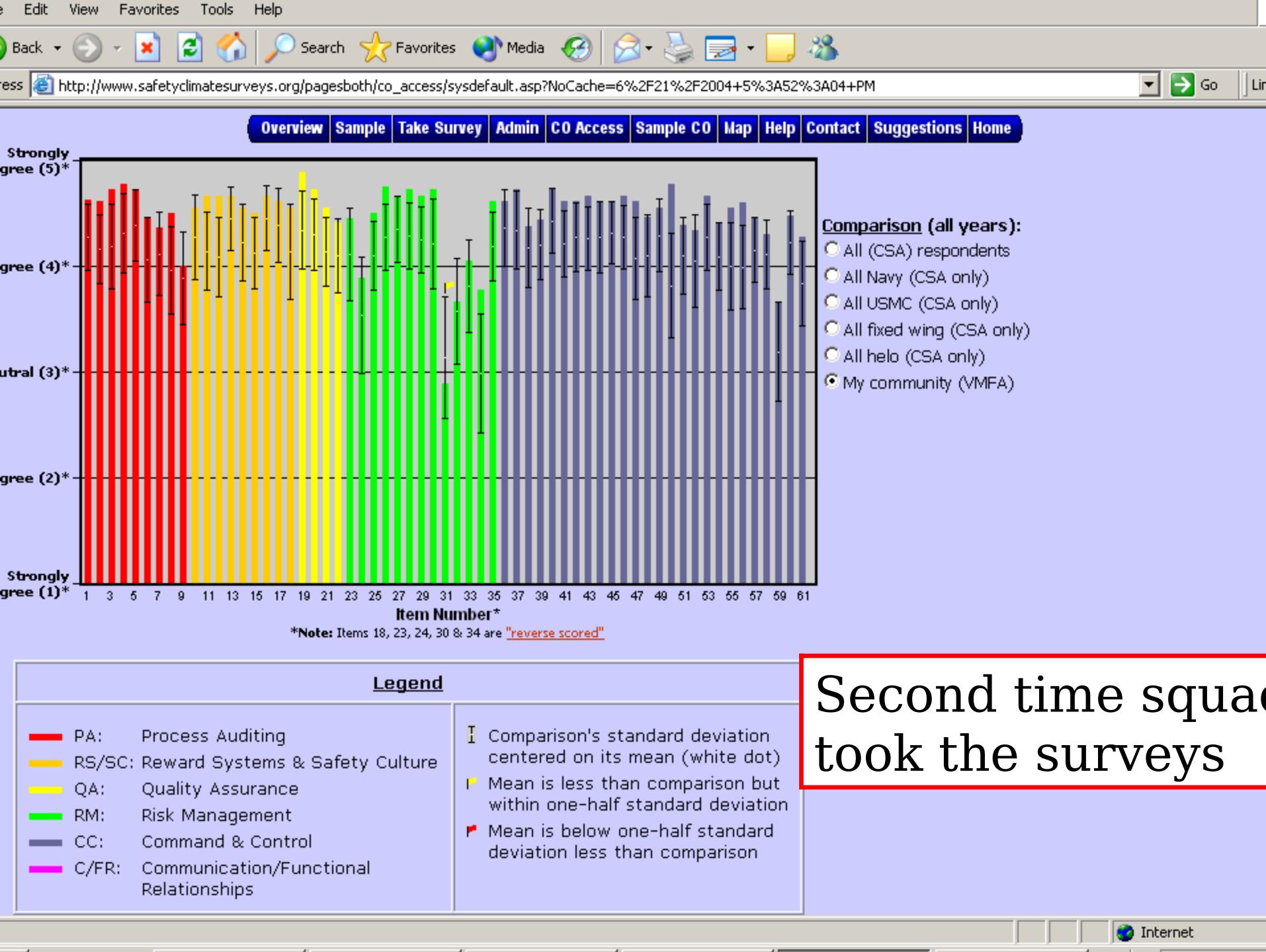
 Select from the following: ▾

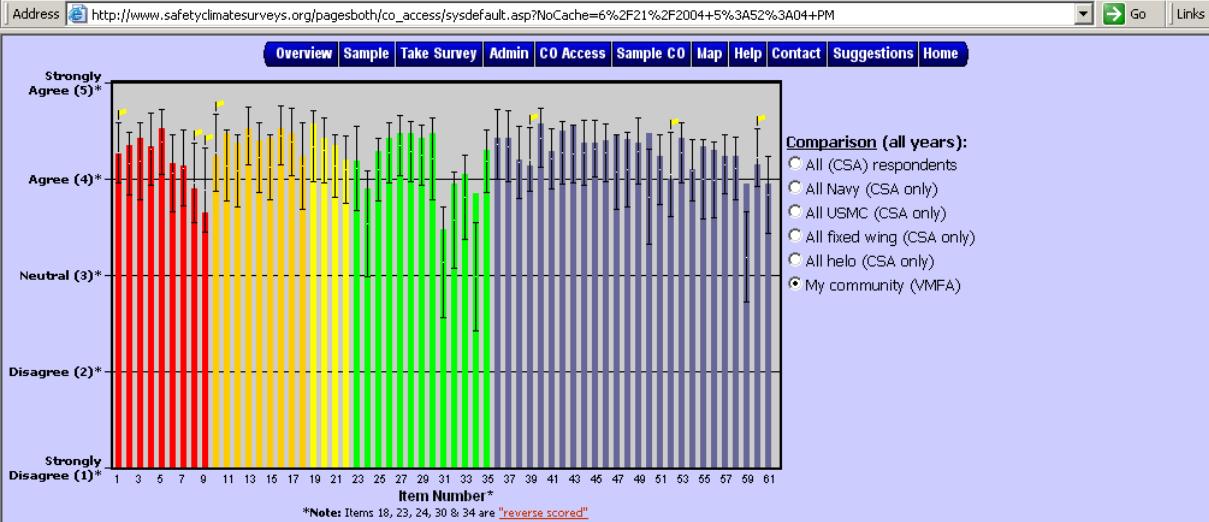
Community

Option: COs AccessID from squadron's *prior* surveys  
(if present, comparisons will use this instead of other squadrons)

# Two Codes, Current and Pr

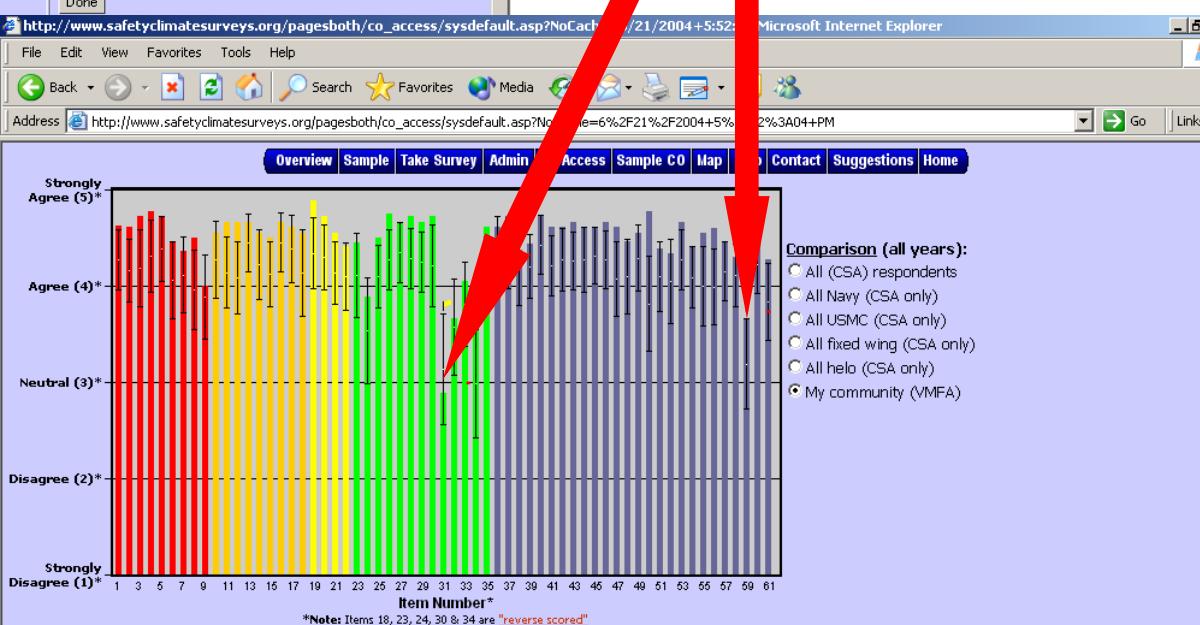
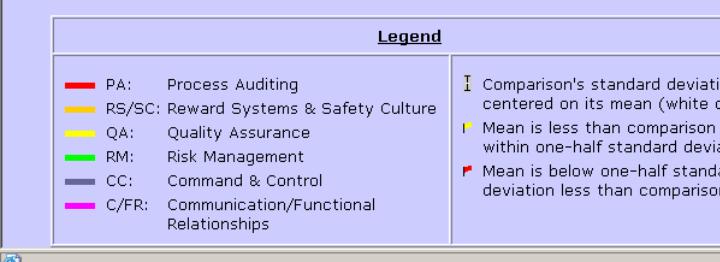






First time squadron took the surveys

Note: two di

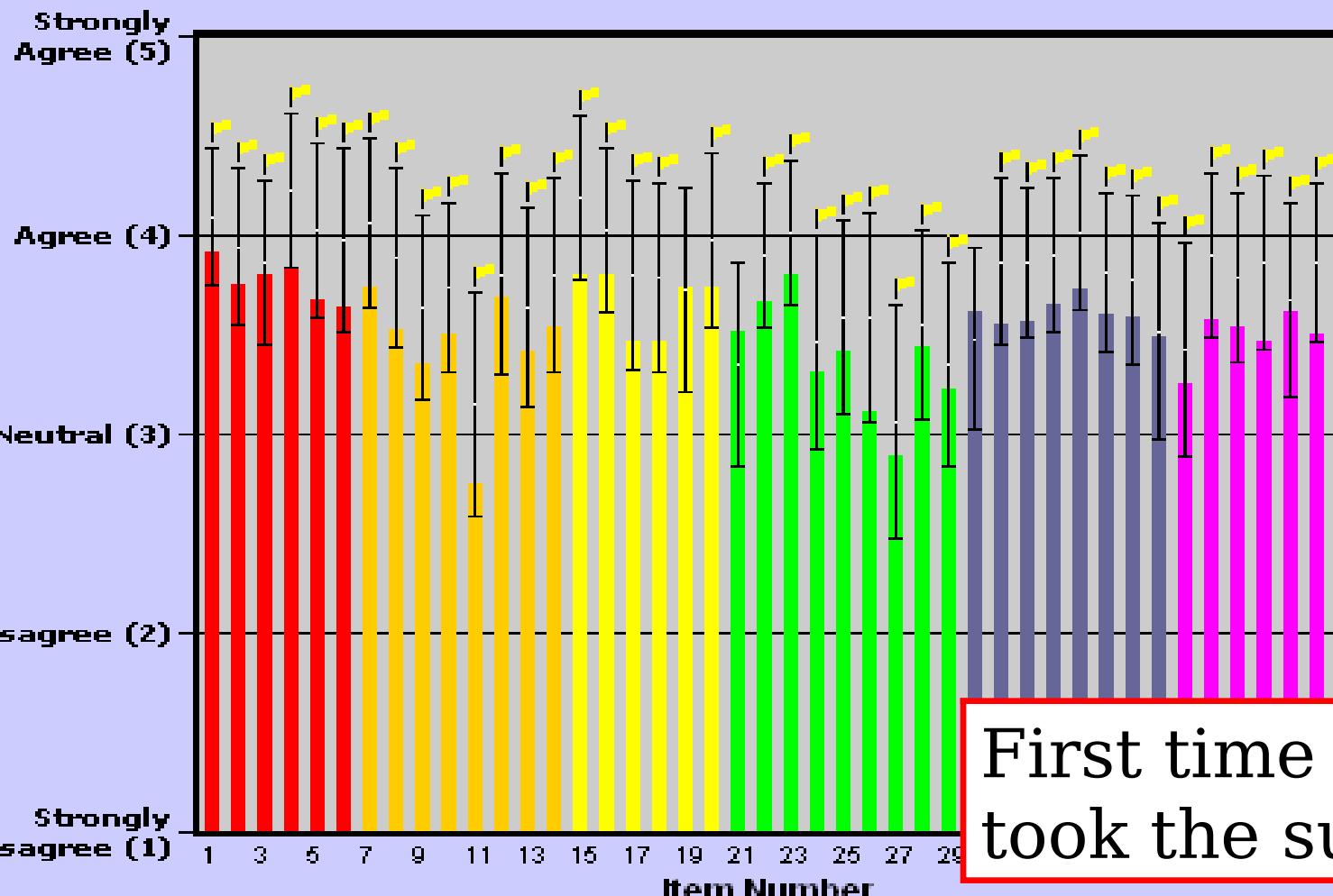


Second time squadron took the surveys

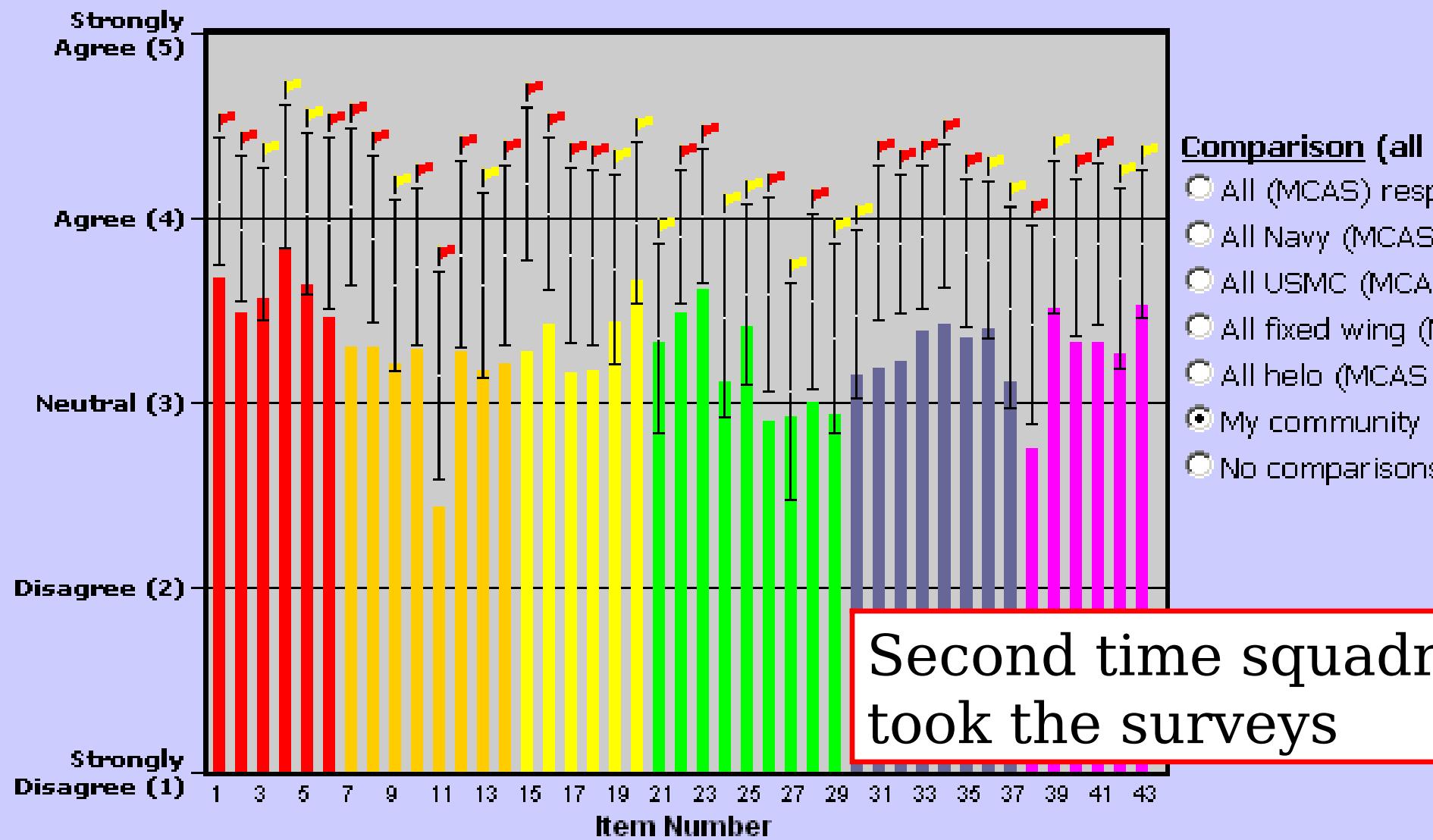


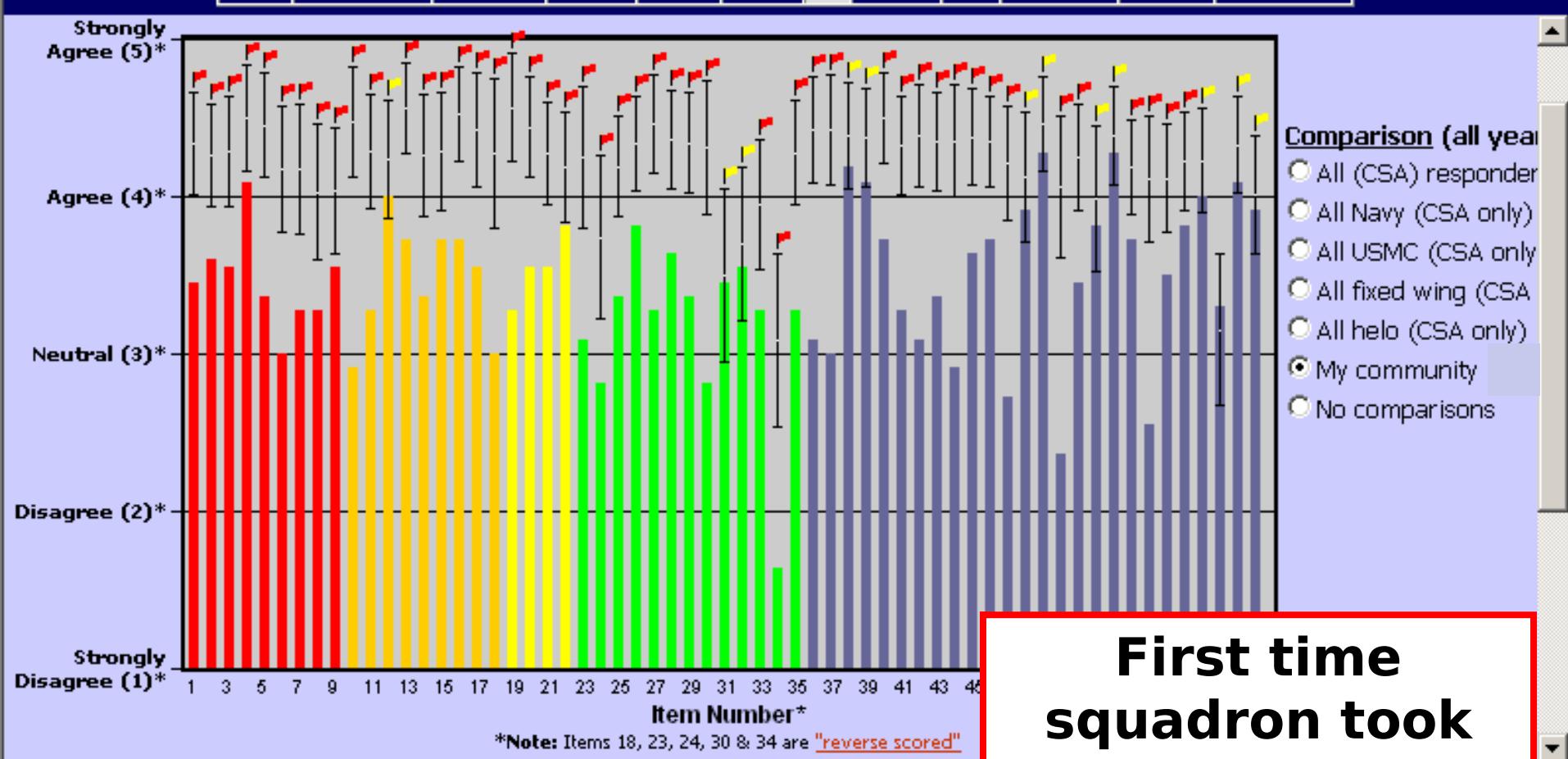
Address  [http://www.safetyclimatesurveys.org/pagesboth/co\\_access/sysdefault.asp?NoCache=8%2F19%2F2004+11%3A59%3A59&PageID=1](http://www.safetyclimatesurveys.org/pagesboth/co_access/sysdefault.asp?NoCache=8%2F19%2F2004+11%3A59%3A59&PageID=1)

[Home](#) | [Instructions](#) | [Overview](#) | [Sample survey](#) | [Take survey](#) | [Admin](#) | [CO](#) | [Sample CO](#) | [Map](#) | [Help/FAQ](#) | [Contact](#)

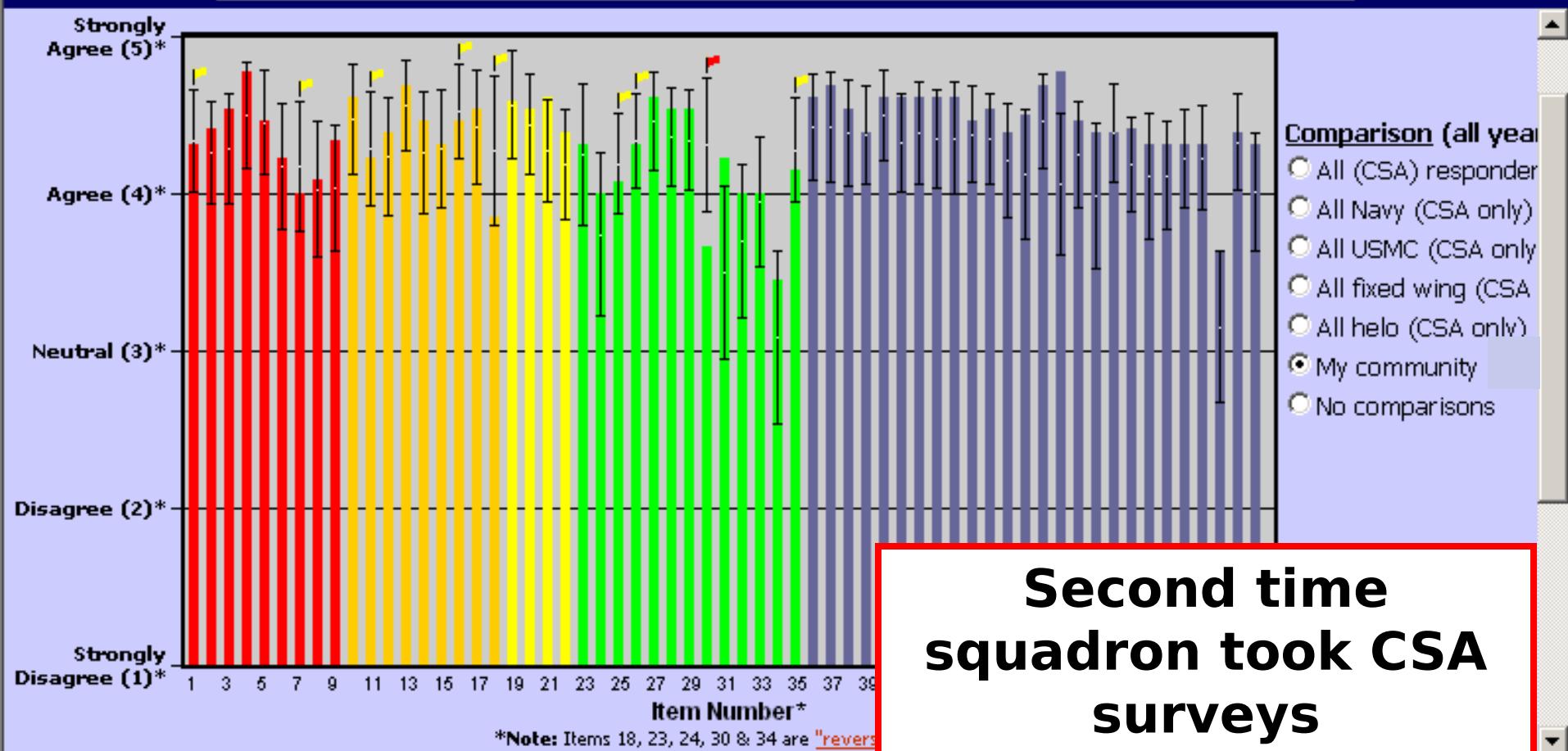


# First time squadron took the surveys





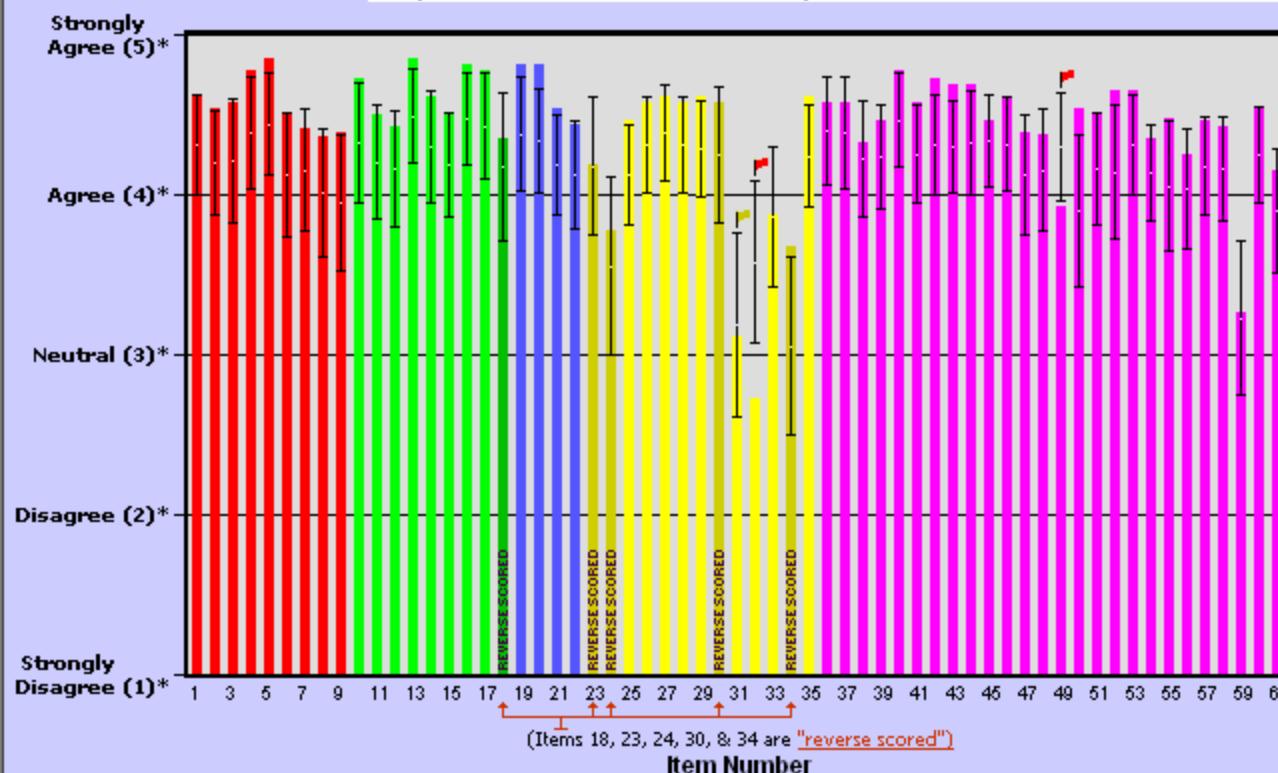
**First time  
squadron took  
CSA surveys**



**Second time  
squadron took CSA  
surveys  
(new CC; one year  
later)**



### Graph Of Mean For All Items Compared With Mean And Standard Deviation For Community (VMFA)



#### Comparison (all years):

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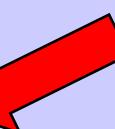
### Composite Categories Graph

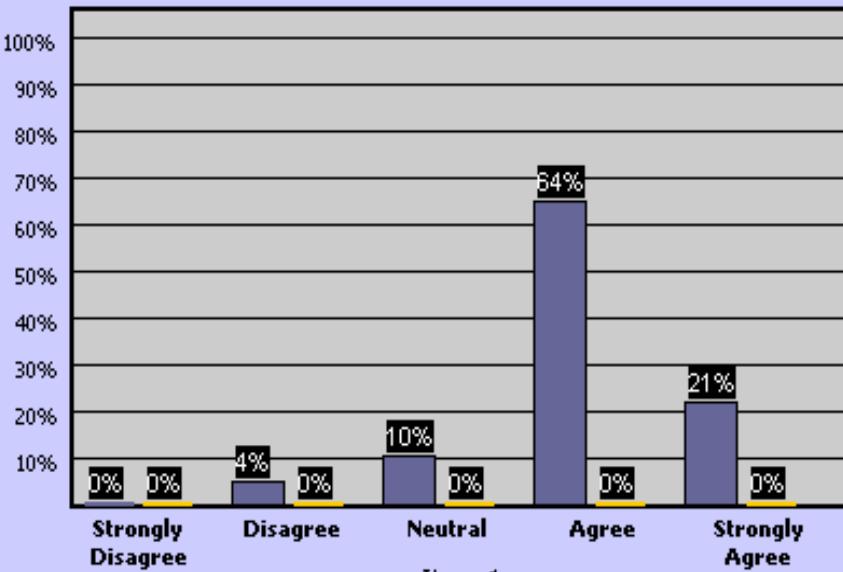
All Survey Items Table

Individual Item Graph

Printable Data Summary

Debriefing Support



**HSL 100 Commander's Access**

Item 1:

My command conducts adequate reviews and updates of safety standards and operating procedures. (PA)

Select item(s) to display:

 
   Hide

Show Summary Graphs and Tables for:


← New!



N/A:

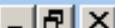
Don't Know:

Select A Comparison Mode:

- Aircraft Category
- Aircraft Community
- Aircraft Model
- None

**Legend** (click small colored squares to hide percentage displays):HSL 100:   COMPARISON: Note: "N/A" and "Don't Know" responses are not included in statistics.



## School of Aviation Safety Naval Postgraduate School

[SURVEY OVERVIEW](#)[SAMPLE SURVEY](#)[TAKE A SURVEY](#)[SURVEY ADMIN](#)[C.O. ACCESS](#)[SAMPLE C.O. ACCESS](#)[SITE MAP](#)[HELP/FAQ](#)[CONTACT US](#)[SUGGESTIONS](#)[HOME](#)

### VMFA 102 Commander's Access

68. THE MARINES IN THIS SQUADRON WORK ANYWHERE FROM 12 TO 16 HOURS EVERY 5 TO 6 DAYS A WEEK WHEN WORKING 12 HOURS ON AND 12 OFF. SOME MEALS ARE MISSED BECAUSE THEY ARE SO TIRED FROM WORK THAT THEY SLEEP THE ENTIRE 7 TO 10 HOURS THEY ARE OFF. OR, WHEN WORKING THEY ARE NOT AFFORDED ENOUGH TIME TO EAT DURING MAINTENANCE AND GO ON AN EMPTY STOMACH TILL THEY GET OFF WORK.  
FOR EXAMPLE: A MARINE WHO IS ON COM RATS IS EXPECTED TO BRING THERE CHOW WITH THEM TO WORK. SAY THIS MARINE LIVES IN GEO BACHELORS QUARTERS WITH 2 OTHER MARINES AND 1 SMALL FRIDGE. THIS MARINE NORMALLY EATS AT THE CHOW HALL NOT ONLY TO SAVE MONEY BECAUSE HE HAS A CAR PAYMENT, INSURANCE, CHILD SUPPORT, ETC., BUT HE'D RATHER EAT THERE BECAUSE IT IS MORE NUTRITIONAL THAN EATING SOMETHING LIKE BURGER KING. HE DOES NOT GET

Item: 44 Next

Year: All

[Good Ideas](#) [Help](#)[Update Display](#)**Select A Comparison Mode:**

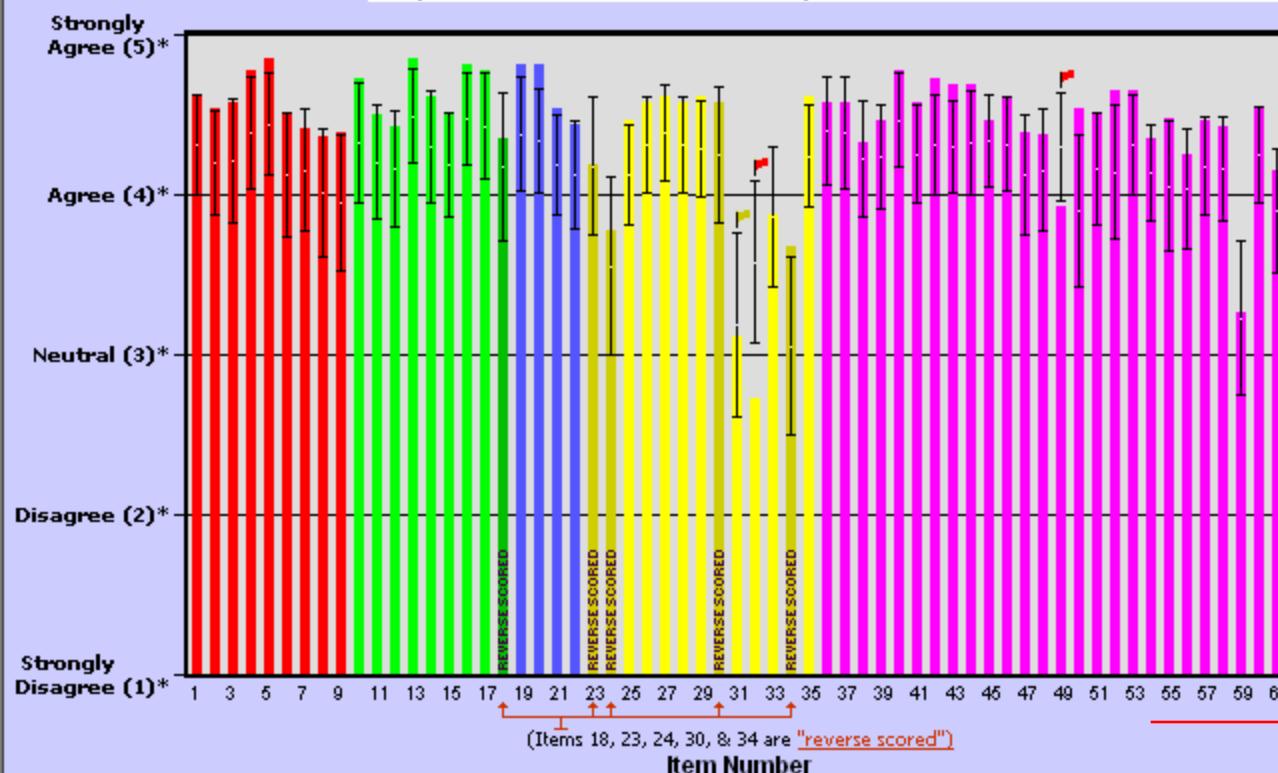
- Aircraft Category
- Aircraft Community
- Aircraft Model

Item 44:

The next quality defect will be caused by... (500 words max.) (QA)



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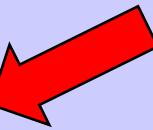
### Composite Categories Graph

[All Survey Items Table](#)

[Individual Item Graph](#)

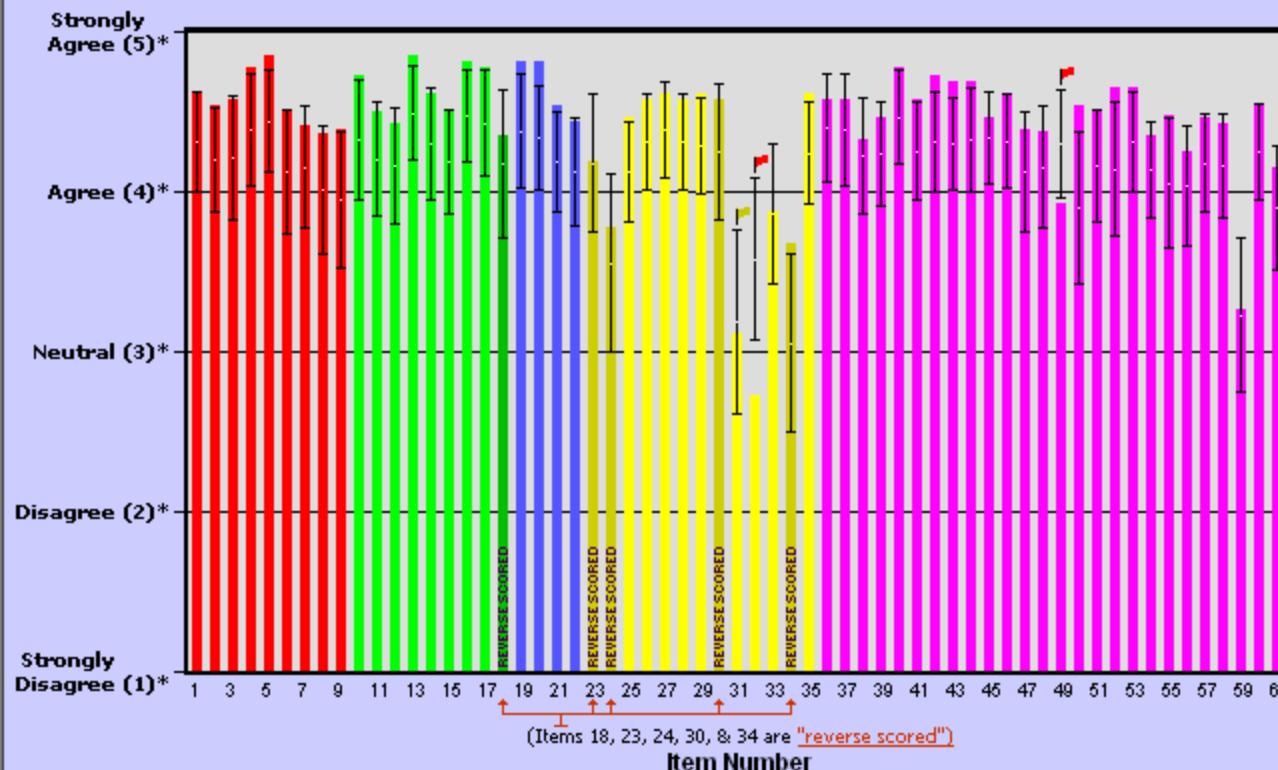
[Printable Data Summary](#)

[Debriefing Support](#)





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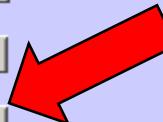
### Composite Categories Graph

[All Survey Items Table](#)

[Individual Item Graph](#)

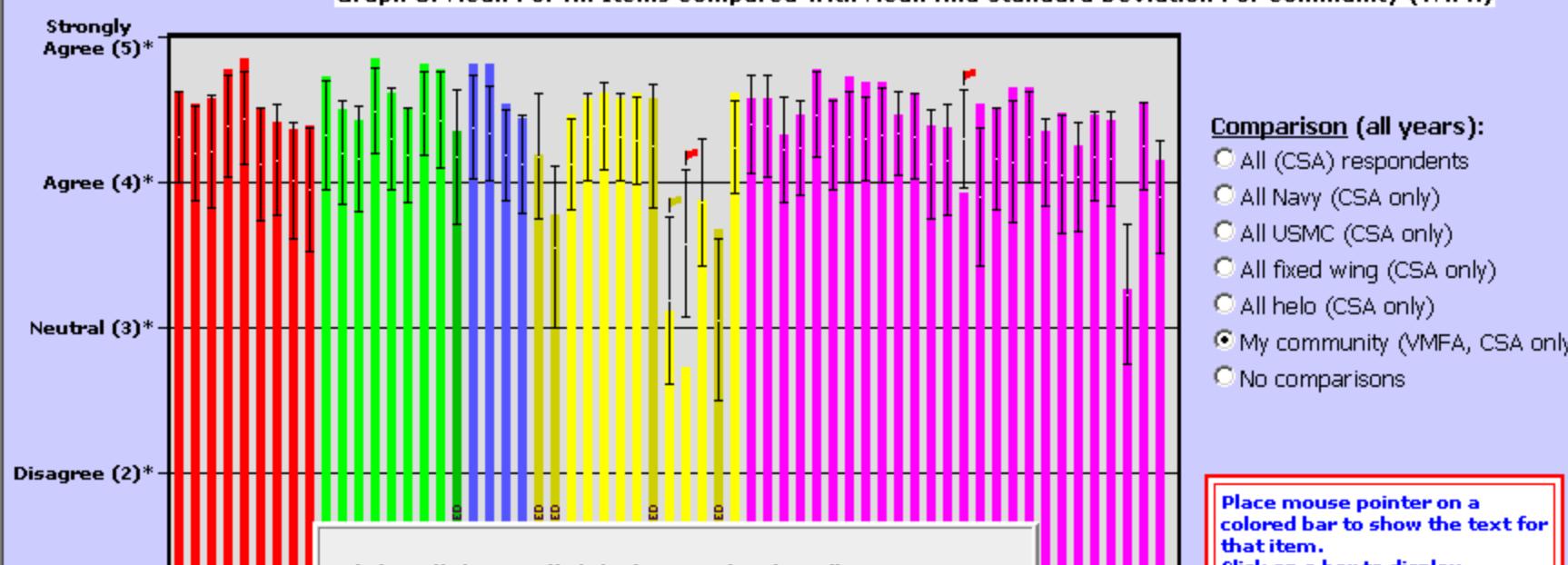
[Printable Data Summary](#)

[Debriefing Support](#)





### Graph Of Mean For All Items Compared With Mean And Standard Deviation For Community (VMFA)



[Example Survey Debrief](#)

[Recommended Format for  
Debrief](#)

[Close dialog](#)

**Survey**

PA: Process

RS/SC: Reward Systems & Safety Culture

QA: Quality Assurance

RM: Risk Management

CC: Command & Control

[Composite Categories Graph](#)

[All Survey Items Table](#)

[Individual Item Graph](#)

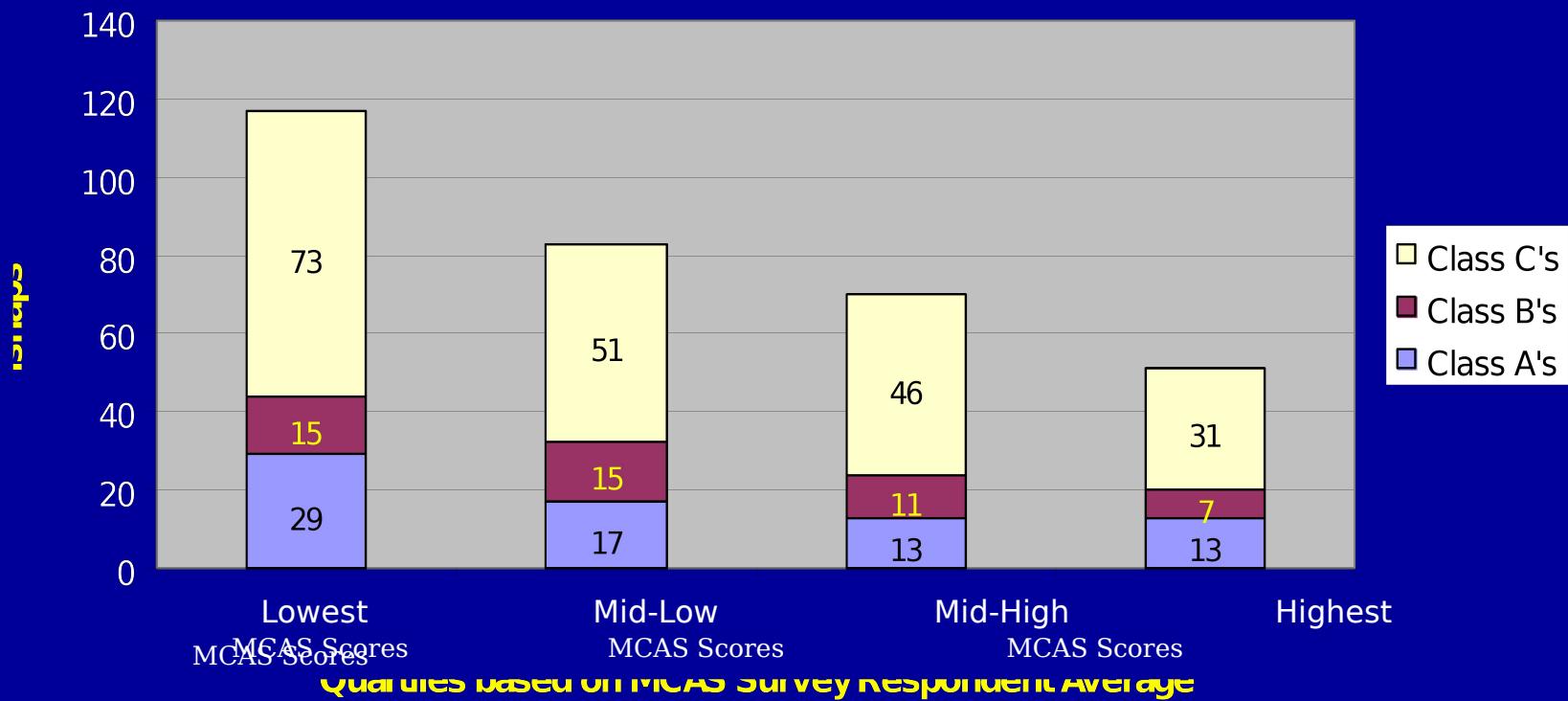
[Printable Data Summary](#)

[Debriefing Support](#)

- Mean is centered on its mean (white dot)
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- Mean is below one-half standard deviation

# Navy Research Results

## Mishaps within 2 Years of MCAS Survey



# Navy Research Results

**Item #31: I am provided adequate resources (time, staffing, budget, & equipment) to accomplish my job.**

**Class A's within 2 Years of Safety Climate Survey**

